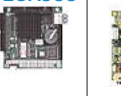


Processor Boards Selection Guide												
Architecture	x86	x86	x86	x86	x86	ARM / XScale	ARM / XScale	ARM / XScale	ARM / XScale	ARM / XScale	ARM / XScale	ARM / XScale
CPU	Core 2 Duo	Pentium M / Celeron M	Intel Pentium III	AMD Geode GX	AMD SC520	Intel PXA270	Intel PXA255	Intel PXA255	Intel IXP425	Intel IXP420	Intel PXA270	Intel PXA270
Maths Co-Processor	✓	✓	✓	✓	✓							
CPU Clock Speed	2.6GHz	Up to 1.8GHz (9)	Up to 1GHz	400MHz	133MHz	520MHz	400MHz	200MHz	533MHz	266MHz	520MHz	520 / 312MHz
Max. RAM	3GB	1GB	512MB	512MB	32MB	256MB	64MB	64MB	64MB	64MB	Up to 128MB	64MB
SRAM (1)				256kB (1)	128kB (1)	256kB	256kB		256kB		256kB	
Onboard Flash			0 / 32MB	0 / 32MB	8 / 16MB	32 / 64MB	16 / 32MB	16MB	16 / 32MB	16MB	64MB	Up to 64MB
CompactFlash (mem. only)			✓		via adaptor							
CompactFlash (CF+)	✓	✓		✓		✓	✓	✓	✓	✓		✓ (4)
SDIO						✓						✓ (4)
PS2 Keyboard / Mouse	✓	✓	✓	✓	✓							
Floppy Disk Drive	✓	✓	✓	✓	✓							
IDE	IDE + 2 x SATA	✓	✓	✓	✓							✓ (10)
Parallel Port (3)	✓	✓	✓	✓	✓							
RS232	4	4	4	4	3	3	4	3	3	2	4	
RS422 / RS485	1	1	1	1	1	2	1		1		1	
Max. Baud Rate	115.2k	921.6k	115.2k	115.2k (7)	115.2k	921.6k	230.4k	230.4k	921.6k	921.6k	921.6k	921.6k
LAN Interfaces	4	2	1	2	1	2	1	1	2	2	2	
Max. LAN Speed	Gigabit	100 Base-T + Gigabit	100 Base-T	100 Base-T	100 Base-T	100 Base-T	100 Base-T	100 Base-T	100 Base-T	100 Base-T	100 Base-T	
USB 1.1			2	2		2	2	1			3	2 (4)
USB 2.0	6	6		2					4			
FireWire (IEEE1394a)		2										
Audio Out / Mic. In	✓	✓	✓	✓		✓	✓				✓	✓
Video Controllers	2	2		1 (8)		1	1	1			1	1
Video Output	CRT / DVI / LVDS / HDTV	CRT / LVDS	CRT / DVI	CRT / TFT (5)		TFT / STN (2) / LVDS	TFT / STN (2)	TFT / STN (2)			CRT / LVDS	TFT / STN (2)
Max. Resolution	2048 x 1536	2048 x 1536	1920 x 1440	1600 x 1200		640 x 480	640 x 480	640 x 480			800 x 600	640 x 480
Watchdog Timer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PC/104 Expansion			✓		✓	✓	✓		✓		✓	
PCI Expansion	PCI + mini PCI	✓	✓	PC/104-Plus								
GPIO (3)	8	8	8	8		16	16	16	8	8		78 (11)
IPC		✓		✓		✓	✓	✓			✓	✓
TPM-ready (6)		✓		✓		✓	✓	✓				
Other Key Features	Dual independent video, onboard LCD inverter driver	Dual independent video, tamper detect, character display output, 48-bit unique ID	Tamper detect, character display output, 48-bit unique ID	SMI722 Dual video controller (TFT / LVDS, CRT and DSTN) (8), Touchscreen int.		Touchscreen int, camera interface, CANbus, GPS, wireless modems, ZigBee interface			Tamper detect, Hardware accelerated encryption	Tamper detect	Touchscreen int.	MMC / SD (4)
Power Management	✓	✓		✓		✓	✓	✓	✓	✓		
Input Voltage	8 - 24V DC	ATX	ATX	5V DC	5V DC	10 - 30V or 5V DC	5V DC	5V DC	5V DC	5V DC	5V DC	3.3V DC
Max. Power Consumption	15 - 45W	12.3 - 36W	40W	15W (5V @ 3A)	4W	4W	1.9W	1.5W	3.5W	3W	2W	1.6W
Cooling	Passive / Active	Passive / Active	Active	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive
Operating Temp.	0 to +60°C	-20 to +65°C	-20 to +60°C	-20 to +60°C	-20 to +70°C	-20 to +70°C	-20 to +70°C	-20 to +70°C	-20 to +70°C	-20 to +70°C	-20 to +70°C	-20 to +70°C
Ext. Temp. Range Option						✓	✓	✓	✓	✓	✓	✓
Form Factor	5.25"	5.25"	5.25"	EBX	PC/104	EPIC	PC/104	PC/104	PC/104	PC/104	PC/104	SO-DIMM
Dimensions	146 x 203mm	146 x 203mm	146 x 203mm	146 x 203mm	90 x 96mm	165 x 115mm	90 x 96mm	90 x 96mm	90 x 96mm	90 x 96mm	90 x 96mm	67.6 x 50mm
Development Kits												
Embedded Linux		✓	✓	✓	✓	✓	✓	✓	✓	✓		
Windows CE .NET / CE 5.0			✓	✓	✓	✓	✓					
Windows XP Embedded		✓	✓	✓								
VxWorks 5.4 / 5.5					✓		✓					
Entry-level DOS		✓	✓	✓	✓							
QNX Neutrino							✓					

(1) Optional.

(2) Conversion from onboard TFT output to CRT or LVDS is possible via an external module.

(3) The Parallel Port can be used to provide an additional 8 x TTL digital GPIO.

(4) Interface via onboard GPIO requires external logic and connector.

(5) The primary video controller is factory fitted as CRT or TFT, ie. two different Geode GX CPU options.

(6) Support for Trusted Platform Module hardware.

(7) COM3/4 can operate to 921.6k with factory build option.

(8) Additional SMI722 dual video controller available as factory build option.

(9) Support for 400MHz FSB only. Highest speed option from Intel Embedded Group is 1.8GHz Pentium M.

(10) IDE interface for DOM only, not for HDD.

(11) GPIO count reduces if interface options (eg. SDIO) used.



For more information, help or advice contact our Sales team:

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Arcom Processor Boards Selection Guide - www.arcom.com/compare

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